

century ago, and even at the present date it cannot well be contradicted. Numerous discoveries regarding the nature of this disease have, however, been arrived at, and among others of recent date the important fact has been reached that an increase of leucocytes is accompanied by the building of a complement, *i.e.*, when there is hyperleucocytosis there is at the same time an immunising process taking place. Is it not possible that to this process may be traced the supposed action of the serum injection of Robertson and others? Great results have been hoped for from treatment by mercury, arsenic and tuberculin, which have all been widely tested. Sodium nuclein, however, remains to be tried.

Nucleic acid is found in the cell nuclei bound by albumen to nuclein, and is, according to Stendel, a tetra-glyco-tetra-meta-phosphoric acid from the thymus, connected alternately with each of the nitrogenous products of decomposition—guanin, adenin, thymine and cytosin.

Sodium nuclein has been used by Fischer and Donath. The former used a 10 *per cent.* solution, and injected 5 gr. at intervals of from three to five days. He made up to thirty-two injections in each case. His results were as follows: The total number of patients treated was 32. Of these 8 had remissions, 3 recovered, and 4 died. Donath's experiments on 36 patients gave the following results: 13 recovered partially and were able to work, 11 were discharged as recovered; 11 were uninfluenced, and 1 died.

The chief action of the drug is to produce hyperleucocytosis.

The histories of five cases treated with sodium nuclein are given. Unfortunately they were not taken at early stages, and only in one case is there a marked influence for the better. The solution used was 2.5 *per cent.* sodium nuclein with 2.5 *per cent.* common salt. Each patient had seven injections in twenty-eight days. Rise of temperature and increase of leucocytes occurred in every case. The temperatures rose as high as 40.3. The leucocytes increased to 21,400. The greatest increase was 150 *per cent.*, and the least, 60 *per cent.* The rise of temperature was highest from six to eight hours after the injection. After eighteen hours it fell noticeably, and considerably after twenty-four hours, when it rose again for a period and did not become normal until the fourth day. Hyperleucocytosis was greater after twelve hours than after six, and after eighteen than after twelve. It began to decrease after twenty-four hours, and was completely reduced after four days.

The five cases are described in detail. The four first, being in the last stages of the disease, were not influenced. The fifth, whose condition was near the terminal stage, was improved mentally and physically. His symptoms pointed to the release of toxic products from the body. Tachycardia disappeared and the blood-pressure became normal.

HAMILTON MARR.

Nutritive Enemata. (*Bull. de la Soc. de Méd. Ment. de Belg., Dec., 1910.*)
Cuyllits.

After an account of the history of nutritive enemata (which goes back to the days of Celsus) and a mention of the classes of cases in which they have been recommended, the writer goes on to say that their

action may be considered from three different points of view—their psychic effect, their stimulating effect, their nutritive effect. The *psychic* influence of nutritive enemata is incontestable, and is familiar to all who have ordered their administration. To produce this effect, two conditions must be fulfilled: the enema must be retained, and it must contain substances which the patient believes to be nutritive. Hence it is that the utterly unscientific nutritive enema of eggs and milk is still so frequently administered, and continues to work wonders. The *stimulating* effect of a nutritive enema containing alcohol is equally certain. The concentration of the alcohol should not exceed 10 *per cent.*, and somewhat less than this is preferable (10 *per cent.* is the alcoholic strength of good claret). The writer considers the use of alcohol *per rectum* especially valuable in dealing with persons in need of a stimulant who have conscientious objections to taking alcohol by mouth. When we come to consider the third use of “nutritive enemata,” for their truly *nutritive* effect, we are at once faced with the difficulty that the anatomical structure of the large intestine shows that its function is not to absorb, but to evacuate. Still, experiment shows that, after all, the large intestine has certain powers of absorption. *Water* is absorbed very rapidly, its absorption from the large intestine being the more rapid in proportion to the degree of thirst; as much as a pint of water has been absorbed in ten minutes. *Sodium chloride* is freely absorbed, and favours the absorption of other substances, provided it is present in solution of a strength not exceeding 1 *per cent.* *Sugars* are absorbed, provided the quantity in solution does not exceed 10 *per cent.*, glucose and saccharose being absorbed more readily than lactose. The *starches* and *dextrine*, being practically inabsorbable from the large intestine, are inadmissible in nutritive enemata. *Fats* are in the same category. It is as regards the absorption of *proteids* that there has been the greatest diversity of opinion. It is now definitely agreed that coagulated albumen is not absorbed. At the other extremity of the proteid-scale lie the peptones; of these, Ewald and other authorities tell us that they are absorbed, “if the intestine tolerates them”—but usually it does not tolerate them. These considerations will show why, of the “classical” nutritive enema of five or six ounces of milk, a raw egg, and sugar, not enough will be absorbed in the course of nine hours to correspond to the nutritive contents of one ounce of milk. In addition, such enemata commonly prove extremely irritant. The conclusions which the author finally deduces from his study are the following: (1) The optimum temperature for a nutritive enema is a little above blood-heat—about 104° F. (2) The solution should be isotonic with the blood, *i.e.*, should contain about 1 *per cent.* of salt; this favours absorption. (3) The quantity of sugar should be from 10 to 15 *per cent.* (4) It is absolutely essential that the enema should be retained from one to two hours. Absorption is most active during the first hour. After two hours fermentation and putrefaction predominate. (5) Therefore, two hours after the nutritive enema, an evacuant enema should be given. (6) The addition of laudanum is undesirable. Its action being central rather than peripheral, by the time the drug could have any effect absorption will be far advanced. (7) The usual quantity of fluid administered in a nutritive enema is five to ten ounces, containing 5 to

10 per cent. of alcohol, 10 to 18 per cent. of ordinary sugar, and 1 per cent. of common salt, at a temperature of 104° F.

M. EDEN PAUL.

5. Sociology.

Some Methods of Restraint applied to the Insane in Morocco [*Sur quelques Moyens de Contrainte appliqués aux Aliénés au Maroc*]. (*Rev. de Psychiat.* May, 1911.) *Lwoff and Sérieux*. (Translated by Dr. M. A. Collins.)

The treatment of mental diseases is, so to speak, non-existent in Morocco. The fault is not due to any antipathy between Islam and the medical treatment of the insane, but solely to the condition of profound decadence which has been developing for a long time in Morocco. Medical care is absent in that country, and the treatment of diseases of all kinds is confined to the application of the talisman, invocations, prayers, and the empirical use of some drugs, etc.

The French Government has instituted dispensaries and hospitals in the principal towns, under the direction of French doctors. Neither the fear of strangers nor religious differences have prevented the natives (both male and female) from coming in by hundreds to ask for medical and surgical treatment. The day will come when the Mussulmans of Morocco will have the insane cared for in properly managed asylums.

Our inquiry was made, thanks to the intervention of Regnault, French Minister at Tangier, M. de Billey de BeauMarchais, and of M. Gallaird, Consul at Fez, in the moristans and prisons of the principal towns of Morocco. As to our visits and the information we obtained in the most diverse conditions, we are able to state as follows :

(1) Those insane who are, or appear to be, harmless, are allowed to wander at liberty, beg in the streets, and sleep in the open air ; they are clothed in rags, and even both men and women are met with in a state of complete nudity. Patients who have mystic ideas become, as in some other countries, objects of veneration by the crowd. They are those "holy men and women" living on the public roads, who have alone attracted the attention of travellers. Thus has arisen the fable current in Europe, that the lunatic in Mussulman countries is always considered a "holy" man. There is so little truth in this statement that we observed one day in Tangier, at the Socci (market), in open daylight, a dement publicly chased by a band of roughs, who were bullying him and throwing stones at him.

(2) When the inoffensive insane become troublesome or dangerous, the relatives are compelled to shut them up at home, where they are frequently tied up and ill-treated. It has happened that patients of this kind, badly supervised by their family, and who have become noisy, troublesome, and dangerous, have been shot dead by the neighbours.

(3) Those of the insane whose families refuse to keep them and are dangerous, are placed in the moristans and in the prisons. In the moristan, a kind of casual ward attached to the Mosques, is found a